#6

No 27

Cynanche Trachealis

Or

Croup

By Samuel C. Dickenson of Virg
passed March 15 1816

No 123 South 9th Street

Introduction

In viewing the numerous and almost unbounded extent of the human creation, who are subjected to pains and afflictions by disease, nearly all of which are submitted to the judgment of the medical practitioner; I think it behoves all who intend to practice the healing art, as the life of many will be intrusted to his care, to search into the nature and causes of diseases and to indeavour to become acquainted with such remedies as will safely and effectually remove them.

Accordingly, we find that the croup (which constitutes the subject of the following essay) is a disease, (among the many) which has solicited the attention of medical writers; as being one, which, from the frequency of its occurrence, as also the distressing symptoms under which it is presented to the care of the practitioner

titioner, demands his most minute and attentive investigation.

Notwithstanding this disease has occupied the labours of several distinguished writers, some of whom are generally read; yet when I consider the subjects who are particularly liable to the ravages of its malignant effects, (I allude to children,) many of whom are incapable of communicating, or explaining the nature of their sufferings, and as the mature judgment of the physician is generally called upon to explore the nature and cause of such disease, likewise to administer such medicines as will effectually cure it; I think every attempt (even this imperfect one) to illustrate the subject may be attended with its advantages. If nothing more, it will at least recall to the memory a disease, which is often the opprobium of our art.

But, in attempting a treatise upon this subject

ject I do not anticipate any thing new. Neither could it be expected that one who has been so little engaged in the practice of physick should add anything, after practitioners of great eminence have had so much experience in treating it. My remarks therefore, will be confined to a general ~~observations~~ view of its nature, symptoms and causes, together with the treatment which ~~have~~ has been found most successful.

Cynanche Trachealis, or Croup

This disease, which by ~~its~~ fatal termination has cut off in the very germ of life (if I may use the expression) so many of the human family, is one, which has excited some difference of opinion among medical practitioners. It has been contended by some, that it is an inflammatory disease; while others on the contrary have considered it as spasmodic.

spasmodic. But, there is, probably, no case of it, in which both of these are not to a certain degree combined; and although the inflammatory symptoms may be generally most prominent; yet the existence of a spasmodic cynanche can not be denied. For there have been frequently cases in which suffocation has come on so suddenly, that it is impossible that inflammation which is (comparatively) a slow process, could produce such violent effects in so short a time.

During the last spring I witnessed a case of this kind in a child about nine months old; who from having been exposed to the cold and damp atmosphere the day before, was attacked with the most violent and oppressive symptoms of spasmodic Croup. Which, notwithstanding large doses of the Emetic Tartar was administered together with the use of the warm bath and copious bloodletting, the child continued to

decline

decline, untill Death (in the space of twelve hours) removed her sufferings.

The Croup is a disease particularly incident to children; though it seldom attacks them at the breast and rarely over ten years old. But, there are, however, instances of adults being consigned to the silent tomb by its fatal consequences.

This disease, according to Doct.r Cullen, sometimes prevails epidemically and is peculiar ~~to~~ ~~some~~ to some families; but it is never contageous. It generally comes on with a slight chill and other symptoms of fever; such as, heat, thirst, restlessness &c.

Sometimes it comes on in the form of a catarrh, and thus continues three or four days and then it takes on the true form of the disease. It likewise makes its attack very suddenly; and I have seen it terminate in death in the space of twelve hours from its commencement.

The peculiar symptoms which characterise this disease are, a difficult respiration attended with a wheezing noise in inspiration, a hoarse, dry cough, compared by some to the shrill barking of a dog, and sometimes attended with vomiting; deglutition is somewhat impeded, and there is a sense of stiffness about the Larynx and an increase frequency of the pulse.

As the disease advances respiration becomes more stridulous and is performed with greater difficulty, the eyes become swelled red and watery, the cheeks flushed, and the mouth is often filled with a viscid saliva: the patient complains of heat over the whole body, attended with thirst, restlessness, and a continual desire to change from place to place.

Sometimes a degree of drowsiness comes on, from which, however, the little sufferer is often aroused by a violent cough and fits of suffocation

Among the causes which produce this disease, the application of cold and moisture appear to be the most general, as it prevails most frequently in the winter

winter and spring seasons. It is also sometimes produced by marsh miasma and worms.

The duration of this disease is very equivocal, in some cases it has terminated in a few hours, and in others not for several days and even one or two weeks. Much however, depends upon the degree of inflammation, the violence of the spasm, and the strength and constitution of the patient.

From the dissections of those who have died of this disease, it is observed, that there is always to be found a lymphatic incrustatation, or membranous substance lining the larynx. That there never does exist a membrane I will not deny; as my observations have been very limited. But in the only two cases which I have seen, there was no membrane, but a collection of mucus.

From the violent effects of this disease upon the system, and also from its speedy and fatal termination, we should resort to the most active remedies to arrest its fel progress. Therefore, if there be much inflammation, we should first resort to bloodletting as the most proper

proper remedy, and which, has of itself proved efficacious in putting a stop to its rapid progress. The blood may be drawn either from the jugular vein or arm; proportioning the quantity to the age and habit of the child; and if the breathing be very difficult it should be drawn in a large quantity.

If the symptoms should not abate, or if they should return, topical bleeding by the application of leeches to the Trachea should then be had recourse to. But previous general bleeding should not be omitted.

The detraction of blood from children has however, been objected to by some practitioners; supposing them more apt to sink under its operation. But, the hypothesis is entirely erroneous, and in its effect, would be often attended with the most mischievous consequences. For, it has been satisfactorily proven by very experienced practitioners, that blood-

letting

letting may be used with as much safety in the complaints of children, as in those of adults; and that they certainly recover much sooner from its effects.

There are however some cases in which the impending dissolution of life is so strongly marked, as to require remedies of more speedy operation. In such cases, emetics generally succeed best; and have alone cured the disease when imployed early, and in sufficiently large doses to vomit freely.

Emetics are also highly beneficial in the inflammatory stages of Croup, after bleeding, appearing mechanically to remove the mucus from the lining membrane of the Trachea; and also, by relaxing the spasm and producing a determination to the surface.

The emetics generally used, are, the Tartarised Antimony, sulphate of Zinc, Specac, Antimonial wine, turpeth mineral combined with Specac

and squills. But the Tartarised Antimony is generally preefered.

To assist the operation of emetics the warm bath is very beneficial. And the ingeneous Dr Chapman related a case in which he was called to a child nine months old who was labouring under the most violent and oppressive symptoms of croup, in which he gave fifteen grains of emetic Tartar without any effect untill aided by the warm bath and copious bloodletting. It then had the desired effect, and snatched, as it were, the little sufferer from the jaws of death.

The application of blisters over the Trachea behind the ears and even to the chest, are often attended with the happiest effect.

When the bowels are costive we should give Calomel purges in doses sufficiently large to evacuate freely the alimentary canal.

This valuable medicine ~~medicine~~ first introduced into the treatment of this disease by

Dr Khun, has been used in innumerable instances with the greatest benefit. And Dr Hamilton observes, that in every case in which he has used it previous to the appearance of lividness of the lips and other mortal symptoms, he has succeeded effectually in curing the disease.

Diaphoretics (particularly the antimonial preparations) are sometimes of service; especially if it depend on a suppressed spershpiration

When the disease becomes more mild, but there still remains a cough, or hoarseness, with a tightness of the chest and deficient expectoration, the Polygala Seneka given in decoction is attended with advantage. likewise the oxymel of squill may be used to assist the expectoration.

When this disease assumes the spasmodic form opiates and antispasmodics, such as Ether, if given in large doses at the commencement of the attack are often attended with very good

4

effect; and I have myself seen the Tinctura opii used in one case with the happiest success.

Afafoetida has also been highly recommend, and Dr Millar has used it to a considerable extent both internally by the mouth and in the form of Enemata. I have never seen it used, but have no doubt that it would be of advantage.

The inhaling the vapour of warm water and vinegar I have seen used with great relief to the patient.

I must now conclude this short essay: too limited, I fear, for the important subject of which it treats.

In attempting a treatise upon this disease, I must confess my want of sufficient practical experience to do it justice. But, as it has always been an established rule in this University, to require of each candidate for the degree of Doctor of Medicine, that he should submit for his examination, an essay upon some subject

connected with the science of Medicine; I have been induced to offer such remarks upon the foregoing disease, as have come more particularly under my observation. And, although I feel conscious of its imperfection, yet it has been composed with such assiduity and labour that it will not, I hope, be altogether unworthy the attention of the learned Gentlemen, who preside in this University.

Should I be successful in obtaining their approbation, my wishes will be highly gratified and my labour amply rewarded.

But I cannot stop here: I should think myself destitute of humanity and gratitude, were I not to avail myself of this opportunity of returning you my sincere acknowledgments for the many advantages derived from your instructive lectures.

That you may, in health, long continue to inspire, into the minds of your audience, those salutary admonitions, is the wish of the

Author